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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/650,120	08/28/2000	Samuel H. Christie IV	10751RNUS01U	8022

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EXAMINER
SHERKAT, AREZOO

ART UNIT	PAPER NUMBER
2131	

DATE MAILED: 11/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

   A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM
   THE MAILING DATE OF THIS COMMUNICATION.
   - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
     after SIX (6) MONTHS from the mailing date of this communication.
   - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
   - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
   - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
     Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
     earned patent term adjustment. See 37 CFR 1.704(b).

Status

   1)☒ Responsive to communication(s) filed on *18 June 2004*.
   2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.
   3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
      closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

   4)☒ Claim(s) *1-29* is/are pending in the application.
      4a) Of the above claim(s) _____ is/are withdrawn from consideration.
   5)☐ Claim(s) _____ is/are allowed.
   6)☐ Claim(s) _____ is/are rejected.
   7)☐ Claim(s) _____ is/are objected to.
   8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

   9)☐ The specification is objected to by the Examiner.
   10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.
      Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
      Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
   11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

   12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
      a)☐ All b)☐ Some * c)☐ None of:
      1.☐ Certified copies of the priority documents have been received.
      2.☐ Certified copies of the priority documents have been received in Application No. _____.
      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
         application from the International Bureau (PCT Rule 17.2(a)).
      * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

   1)☐ Notice of References Cited (PTO-892)
   2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
   3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
      Paper No(s)/Mail Date _____.
   4)☐ Interview Summary (PTO-413)
      Paper No(s)/Mail Date. _____ .
   5)☐ Notice of Informal Patent Application (PTO-152)
   6)☐ Other: _____.

Response to Arguments

Applicant's arguments filed one June 18, 2004 have been fully considered but they are not persuasive.

Applicant discloses packet filtering by opening and closing a pinhole in a firewall to permit the flow of packet data, based on whether or not the access conditions are met (i.e., the source and destination address in the packet header)(Specification, Page 2, lines 1-13). Cain discloses packet filtering by establishing and closing a bypass communication route around the communication router to allow communication between preselected combinations of machines located on opposite sides of the firewall based on whether or not the filter conditions are met (Cain, Col. 2, lines 5-58).

Applicant argues that Cain fails to disclose the concept of a firewall pinhole as the applicant discloses it in the specification: " ... a pinhole opening in the firewall may also be referred to as a packet filter ... ". Packet filtering is well known to one skilled in the art and Cain specifically discloses as: " A firewall router is essentially a packet filter, allowing communication between selected combinations of internal and external machines" (Col. 1, lines 40-62). Also, Cain discloses providing a method and system to provide access from outside a firewall router to a selected server (Col. 2, lines 5-30).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 5, 8, 12, 15-17, 21, and 25-27 are rejected under 35 U.S.C. 102(b) as being anticipated by Cain, (U.S. Patent No. 5,778,174 and Cain hereinafter).

Regarding claim 1, Cain discloses a method of remotely controlling a firewall from a firewall controller (Fig. 1, element 16) in order to permit the flow of packet data through said firewall, the method comprising:

sending a request message from a firewall controller (i.e., firewall router, Fig. 1, element 16) to a firewall requesting that a pinhole (i.e., bypass route) be opened, and opening a pinhole in said firewall (i.e., establishing first and second communication channels based on client's request)(Col. 3, lines 14-67 and Col. 4, lines 1-2);

sending a request message from a firewall controller (i.e., firewall router, Fig. 1, element 16) to said firewall requesting that a pinhole (i.e., bypass route) be closed, and closing said pinhole (i.e., closing second and first communication channels based on server's request)(Col. 4, lines 3-15).

Regarding claim 2, Cain discloses further comprising:

determining the need for a pinhole (i.e., bypass route) in said firewall (Col. 2, lines 40-67 and Col. 3, lines 1-14).

Regarding claim 3, Cain discloses wherein said step of determining occurs at

said firewall controller (i.e., firewall router, Fig. 1, element 16, is essentially a packet

filter allowing communication between pre-selected combinations of machines located

on opposite sides of the firewall)(Col. 2, lines 50-58).

Regarding claim 5, Cain discloses further including the step of determining the

need for a pinhole prior to sending a request that a pinhole be opened (i.e., packets

which do not satisfy filter conditions are discarded by the firewall router)(Col. 2, lines 50-

58).

Regarding claim 8, Cain discloses a firewall controller (i.e., firewall router) for

permitting the flow of packet data (i.e., filtering packets), said firewall controller

comprising:

     means for determining a need for a pinhole in a firewall (Col. 2, lines 40-57);

     means for sending a request message to said firewall requesting that a pinhole

be opened in said firewall (Col. 3, lines 15-67); and

     means for sending a request message to said firewall requesting that said

pinhole be closed in said firewall (Col. 4, lines 1-22).

Regarding claim 12, Cain discloses a firewall responsive to a firewall controller

(i.e., firewall router) for permitting the flow of packet data (i.e., filtering packets), said

firewall comprising:

means (i.e., hardware or software or combination of the both) for receiving a
request message from said firewall controller requesting that a pinhole be opened in
said firewall, means for opening a pinhole in said firewall (Col. 3, lines 15-67);

means for receiving a request message from said firewall controller requesting
that said pinhole be closed in said firewall, and means for closing said pinhole in said
firewall (Col. 4, lines 1-22).

Regarding claim 15, Cain discloses a firewall responsive to a media gateway
controller (i.e., firewall router) for permitting the flow of packet data (i.e., filtering
packets), said firewall comprising:

means for receiving a request message from said media gateway controller (i.e.,
firewall router) requesting that a pinhole be opened in said firewall, means for opening a
pinhole in said firewall (Col. 3, lines 15-67);

means for receiving a request message from said media gateway controller (i.e.,
firewall router) requesting that said pinhole be closed in said firewall, and means for
closing said pinhole in said firewall (Col. 4, lines 1-22).

Regarding claim 16, Cain discloses a computer program product for remotely
controlling a firewall from a firewall controller (i.e., firewall router) in order to permit the
flow of packet data through said firewall, the computer program product having a
medium with a computer program embodied thereon, the computer program product
comprising:

computer program code in said firewall controller for sending a request message

to said firewall requesting that a pinhole be opened, and computer program code for

sending a request message to said firewall requesting that a pinhole be opened in said

firewall (Col. 3, lines 15-65); and

computer program code for sending a request message to said firewall

requesting that said pinhole be closed in said firewall (Col. 3, lines 65-67 and Col. 4,

lines 1-22).

Regarding claim 17, Cain discloses further comprising:

computer program code in said firewall controller for determining the need for a

pinhole in said firewall (Col. 2, lines 40-57).

Regarding claim 21, Cain discloses a computer program product in a firewall

controller, said firewall controller operative with a firewall, the computer program product

having a medium with a computer program embodied thereon, the computer program

product comprising:

computer program code for determining the need for a pinhole in said firewall

(Col. 2, lines 40-57);

computer program code for sending a request message to said firewall

requesting that a pinhole be opened in said firewall, and computer program code for

sending a request message to said firewall requesting that said pinhole be closed in

said firewall (Col. 3, lines 15-67 and Col. 4, lines 1-22).

Regarding claim 25, Cain discloses a computer program product in a firewall,

said firewall responsive to a firewall controller, the computer program product having a

medium with a computer program embodied thereon, the computer program product

comprising:

computer program code for receiving a request message from said firewall

controller requesting that a pinhole be opened in said firewall, computer program code

for opening a pinhole in said firewall (Col. 3, lines 15-65);

computer program code for receiving a request message from said firewall

controller requesting that said pinhole be closed in said firewall, and computer program

code for closing said pinhole in said firewall (Col. 4, lines 1-22).

Regarding claim 26, Cain discloses a computer program product in a firewall,

said firewall responsive to a media gateway controller (i.e., firewall router), the computer

program product having a medium with a computer program embodied thereon (i.e.,

some sort of storage device, namely a hard disk), the computer program product

comprising:

computer program code for receiving a request message from said media

gateway controller requesting that a pinhole be opened in said firewall, computer

program code for opening a pinhole in said firewall (Col. 3, lines 15-65);

computer program code for receiving a request message from said media

gateway controller requesting that said pinhole be closed in said firewall, and computer

program code for closing said pinhole in said firewall (Col. 4, lines 1-22).

Regarding claim 27, Cain discloses a computer system for remotely controlling a

firewall from a firewall controller (i.e., firewall router) comprising:

a firewall operatively connected to a private computer network (Fig. 1, element

12) and at least one external computer network (Fig. 1, element 14)(Col. 2, lines 40-67

and Col. 3, lines 1-25);

a firewall controller (Fig. 1, element 16) operatively connected to said firewall for

remotely instructing said firewall to open and close pinholes in said firewall (Col. 3, lines

25-67 and Col. 4, lines 1-15).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

Claims 4, 6, 9, 11, 13, 18, 20, 22, 24, 28, and 29 are rejected under 35 U.S.C.

103(a) as being unpatentable over Cain, (U.S. Patent No. 5,778,174 and Cain

hereinafter) in view of Kimchi et al., (U.S. Publication No. 2002/0120760 and Kimchi

hereinafter).

Teachings of Cain have been disclosed previously.

Regarding claims 4, 11, 20, and 24, Cain does not expressly disclose wherein

said firewall controller is a media gateway controller.

However, Kimchi discloses wherein said firewall controller is a media gateway

controller (i.e., Media Gateway Control Protocol on a network device such as a router

results in a media gateway controller for controlling media gateways to set up media, for

example, voice traffic paths through the distributed network)(Page 4, Par. 0036 and

Page 6, Par. 0081-0095).

Therefore, it would have been obvious to a person of ordinary skill in the art at

the time of applicant's invention to modify the teachings of Cain with the teachings of

Kimchi to include a Media Gateway Control protocol in the firewall router and the

support of H.225.0 FastStart for signaling in the client machine with the motivation to

simplify standards for VoIP technology by eliminating the need for complex and

processor-intense IP telephony devices, this lowering the cost of these terminals

(Kimchi, Page 4, Par. 0036).

Regarding claims 6, 9, 13, 18 and 22, Cain does not expressly disclose wherein

said request messages are formatted in the H.248 protocol.

However, Kimchi discloses wherein said request messages (i.e., voice traffic) are formatted in the H.248 protocol (Page 4, Par. 0036).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify the teachings of Cain with the teachings of Kimchi to include a Media Gateway Control protocol/Megaco or H.248 in the firewall router with the motivation to simplify standards for VoIP technology by eliminating the need for complex and processor-intense IP telephony devices, this lowering the cost of these terminals (Kimchi, Page 4, Par. 0036).

Regarding claim 28, Cain does not expressly disclose wherein said firewall controller is a media gateway controller acting as a call server in a VoIP telephony network.

However, Kimchi discloses wherein said firewall controller is a media gateway controller acting as a call server in a VoIP telephony network (i.e., Media Gateway Control Protocol on a network device such as a router results in a media gateway controller for controlling media gateways to set up media, for example, voice traffic paths through the distributed network)(Page 4, Par. 0036 and Page 6, Par. 0081-0095).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify the teachings of Cain with the teachings of Kimchi to include a Media Gateway controller acting as a call server in a VoIP telephony network with the motivation to simplify standards for VoIP technology by

eliminating the need for complex and processor-intense IP telephony devices, this lowering the cost of these terminals (Kimchi, Page 4, Par. 0036).

Regarding claim 29, Cain does not expressly disclose a media gateway controller.

However, Kimchi discloses wherein said media gateway controller instructs said firewall to open and close pinholes in said firewall such that media gateway endpoints within said private network can communicate with media gateway endpoints outside said private network on a per call basis (i.e., media gateway controller controls media gateways to set up media, for example, voice traffic paths through the distributed network)(Page 4, Par. 0036 and Page 6, Par. 0081-0095).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify the teachings of Cain with the teachings of Kimchi to include a media gateway controller that instructs the firewall to open and close pinholes in said firewall with the motivation to simplify standards for VoIP technology by eliminating the need for complex and processor-intense IP telephony devices, this lowering the cost of these terminals (Kimchi, Page 4, Par. 0036).

Claims 7,10, 14, 19, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cain, (U.S. Patent No. 5,778,174 and Cain hereinafter) in view of Putzolu et al., (U.S. Patent No. 6,611,864 and Putzolu hereinafter).

Teachings of Cain have been disclosed previously.

Regarding claims 7, 10, 14, 19, and 23, Cain does not expressly disclose wherein said request messages are formatted in the common open policy services (COPS) protocol.

However, Putzolu discloses wherein said request messages are formatted in the common open policy services (COPS) protocol (Col. 3, lines 1-67 and Col. 4, lines 1-35).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify the teachings of Cain with the teachings of Putzolu to include common open policy services protocol and COPS request messages with the motivation to provide for a powerful means of managing computer networks (Putzolu, Col. 2, lines 10-20).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of
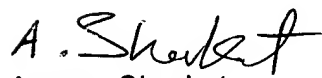
the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Arezoo Sherkat whose telephone number is (571) 272-3796. The examiner can normally be reached on 8:00-4:30 Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on (571) 272-3795. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Nov. 16, 2004